

## EAST Search History

| Ref # | Hits   | Search Query                      | DBs   | Default Operator | Plurals | Time Stamp       |
|-------|--------|-----------------------------------|---|------------------|---------|------------------|
| L1    | 23958  | Liquid near crystal near molecule | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2006/06/15 16:51 |
| L2    | 32227  | vertical near alignment           | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2006/06/15 14:11 |
| L3    | 1069   | 1 same 2                          | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2006/06/15 14:11 |
| L4    | 33548  | no near voltage                   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2006/06/15 14:12 |
| L5    | 33699  | zero near voltage                 | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2006/06/15 14:12 |
| L6    | 15460  | "0 " near voltage                 | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2006/06/15 14:12 |
| L7    | 107390 | bump                              | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2006/06/15 14:13 |
| L8    | 27     | 3 and 7                           | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2006/06/15 14:13 |
| L9    | 10     | 8 and ( 4 5 6 )                   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2006/06/15 14:14 |

## EAST Search History

|     |       |                        |   |    |    |                  |
|-----|-------|------------------------|---|----|----|------------------|
| L10 | 0     | 9 and 5                | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/06/15 14:14 |
| L11 | 10    | 9 and 4                | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/06/15 15:00 |
| L12 | 475   | 3 and ( 4 5 6)         | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/06/15 15:00 |
| L13 | 186   | 12 and polymer         | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/06/15 15:01 |
| L14 | 205   | 12 and polymer\$6      | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/06/15 15:23 |
| L15 | 3760  | tilt adj control       | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/06/15 15:24 |
| L16 | 4471  | alignment adj control  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/06/15 15:24 |
| L17 | 23574 | tilt with control      | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/06/15 15:24 |
| L18 | 42177 | alignment with control | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/06/15 16:11 |
| L19 | 1414  | 17 and 18              | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/06/15 15:25 |

## EAST Search History

|     |         |  |   |    |    |                  |
|-----|---------|--|---|----|----|------------------|
| L20 | 125     | 19 and 1 and 2                             | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/06/15 15:26 |
| L21 | 69      | 20 and polymer\$8                          | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/06/15 15:52 |
| L22 | 1       | 21 and bump                                | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/06/15 15:53 |
| L23 | 4       | 21 and 15                                  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/06/15 16:06 |
| L24 | 178     | tilt adj control with section              | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/06/15 16:07 |
| L25 | 3760    | tilt adj control                           | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/06/15 16:07 |
| L26 | 34      | 1 and 25                                   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/06/15 16:08 |
| L27 | 11      | 26 and polymer\$8                          | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/06/15 16:09 |
| L28 | 3856    | alignment with control with ( layer film ) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/06/15 16:12 |
| L29 | 2379377 | polymer\$9                                 | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/06/15 16:12 |

## EAST Search History

|     |        |                             |   |    |    |                  |
|-----|--------|-----------------------------|---|----|----|------------------|
| L30 | 1396   | 28 and 29                   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/06/15 16:13 |
| L31 | 473510 | liquid near crystal         | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/06/15 16:13 |
| L32 | 1136   | 30 and 31                   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/06/15 16:13 |
| L33 | 121    | 32 and ( bump protrusion )  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/06/15 17:22 |
| L34 | 396    | 28 with 29                  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/06/15 16:28 |
| L35 | 19     | 34 same ( bump protrusion ) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/06/15 16:49 |
| L36 | 14     | "6097464"                   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/06/15 16:41 |
| L37 | 4376   | 29 with ( bump protrusion ) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/06/15 16:50 |
| L38 | 473510 | Liquid near crystal         | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/06/15 16:51 |
| L39 | 221740 | LCD                         | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/06/15 16:51 |

## EAST Search History

|     |      |   |   |    |     |                  |
|-----|------|---|---|----|-----|------------------|
| L40 | 357  | 37 and 38   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2006/06/15 16:52 |
| L41 | 6988 | alignment near control  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2006/06/15 16:52 |
| L42 | 34   | 40 and 41   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2006/06/15 16:52 |
| L43 | 2    | "20040246423"   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2006/06/15 17:37 |
| L44 | 4    | polymer near align\$5 with control<br>with ( layer filmn )    | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2006/06/15 17:38 |
| L45 | 230  | polymer\$7 with alignment near<br>control with ( layer film ) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2006/06/15 17:40 |
| L46 | 227  | 45 and 38   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2006/06/15 17:44 |
| L47 | 58   | 45 and 39   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2006/06/15 17:40 |
| L48 | 80   | Vertical with pre-tilt  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2006/06/15 17:40 |
| L49 | 3    | 48 and 46   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2006/06/15 17:42 |

## EAST Search History

|     |    |                            |   |    |     |                  |
|-----|----|----------------------------|---|----|-----|------------------|
| L50 | 21 | 46 and ( protrusion bump ) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2006/06/15 17:45 |
|-----|----|----------------------------|---|----|-----|------------------|